

ECONOMIC COUNTING FORM (3/2005)

(with examples of taxa producing the types and MU Phytolith Data Base Record—R—numbers)

Slide # _____ Scanner _____ Project _____
 Date _____ Microscope _____ Provenience _____
 Starting point _____
 Stopping point _____

ECONOMIC (record coordinates for each; photograph)**Cannaceae***Canna* smooth, large spheres (80IAa200, 201;

R11,233)

(80IAa200: 511, 80IAa201: 2591, 2639; all *C. edulis*)**Cucurbitaceae** (*Lagenaria siceraria*, *Cucurbita* sp.)

•broken Cucurbitaceae sphere

(80IFb101A)

Cucurbitae tribe

•faceted sphere

(80IFb102)

Lagenaria siceraria

•faceted sphere, elongated facets (80IFb100;

R19,20)

Cucurbita spp.

•faceted sphere, small (wild) 43-74 microns

(80IFb101Ba)

•faceted sphere, large (domesticated), 50-100 microns (80IFb101Bb; R174-

5)

C. ficifolia

•faceted sphere, very large; smaller hemisphere barely scalloped; small scallops on larger hem.

(80IFb101Bc)

Sicana odorifera

•faceted sphere; smaller hemisphere conical in profile

(80IFb101C)

Dioscoreaceae*Dioscorea*

•elongate, undulating root body

(26IIA)

(2577 *Dioscorea* sp.)

Euphorbiaceae*Manihot*

•small, heart-shaped secretory body (160I; R257,269-72)

(a variety of *Manihot esculenta* slides)

Fabaceae*Phaseolus*

•unicellular hair, hooked end, intercellular space, small (40IIIAa300A; R32,33,205-6)

(1466, 2606 *P. lunatus*)

Marantaceae*Maranta, Calathea*

•irregular rhizome cylinder; decorated surface; abruptly narrowed tip (26IAa; R242,258)

(2672 *C. allouia*)

•flat domed rhizome cylinder; ciliate or beaded decoration; distinctive, smooth head (26IAb; R243,259-61)

(2672 *C. allouia*)

•rhizome spindle; cylindrical, tapers gradually to pointed tip; nodular surface (26IB; R244)

(2720 *C. inocephala*)

•flattened nodular body (80ICd)

(2732 *M. gibba*)

Maranta

•seed body tips

(22VIICa)

(2038 *M. arundinacea*)

•seed epidermis; smooth/solid cylinder shaft, long (22VIIAa; R79-83)

(2036 *M. gibba*)

M. arundinacea (2038)

•seed epidermis; smooth/solid cylinder shaft, shortened, grainy surface (22VIIAb; R84-6)

Calathea

•seed body tips (22VIICa, Cb, Cc; R98, 157)

(2347, 8 *C. allouia*; 2022 *C. altissima*)

•diagonally scored rectangular body (60IB; R87,89)

(2027, 8 *C. marantina*; 2594, 5 *C. lutea*)

•seed body, cylindrical, shortened, irregular end, tip acuminate or acute (22VIIBc1; R94,95)

(2022 *C. altissima*)

•flat rhizome type; decorated, beaded edge; elongate, irregularly stellate center
(26IIB; R245,262-3)

(2672 *C. allouia*, 2725 *C. marantifolia*)

•verrucate sphere (80IJ;
R246)

(2672 *C. allouia*, 2725 *C. marantifolia*)

C. allouia (2347, 8)

•seed body; shaft twisted/broken irregularly; broad, blunt tip; granular surface (22VIIBc2)
or flattened grainy tip and thin spines
(22VIIBc3)(R156,158)

Musaceae

•*Musa* trough bodies, squared or rounded (80IIBa; R40-2)(*Musa* dom.)

Poaceae

Zea mays

•wavy-top rondel (30IIBe,
R105,118,119)

(2065, 2077, 2089, 2385)

•gracile spherical body (22VIIBDa,
R128)

(2078, 2383)

•Large, extra-large Variant 1 crosses

Zea spp. (maize and teosintes)

•ruffle-top rondel (30IIBf;
R120,121)

(2065, 2077, 2089, 2385, 2409, 2411, 2419)

•half-decorated rondel (30IIBg;
R122,123)

(Slides 2409, 2411, 2449)

•half-decorated oblong body (22VIIBc;
R131)

(2409, 2411)

•robust globular body (22VIIBDb;
R126,127)

(Slides 2397, 2409, 2411, 2449)

Zea spp. and some other Panicoid grasses

•rectangular IRP, wide (> 7.5 microns) (22VIIBa;
R124)

•irregular IRP (22VIIBb;
R125)

(Slides 2063, 2069, 2409, 2411, 2449)

Zea spp., teosinte

•blocky body, semi-circular cuts (22XA;
R132)

(Slide 2411)